

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P332583-927

Luminaire Tested: **S124DIP-S795D365U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332583-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIP-S795D365U927-4F0-1E-UDD-D  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3724.0 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')  
CIE Type: Semi-Direct

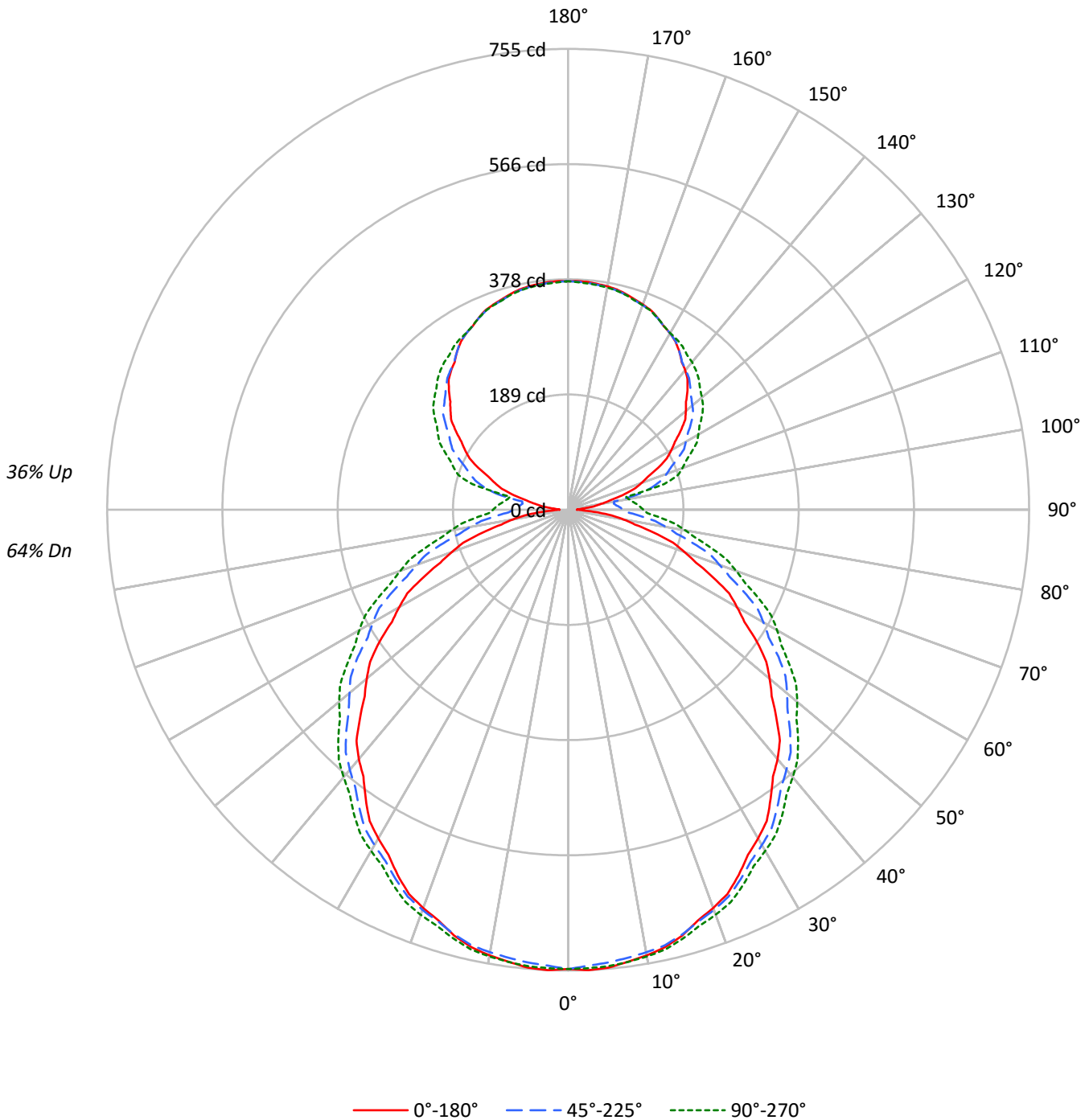
Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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CATALOG NUMBER: S124DIP-S795D365U927-4F0-1E-UDD-D

### Luminous Intensity Polar Plot





TEST NUMBER: P332583-927

CATALOG NUMBER: S124DIP-S795D365U927-4F0-1E-UDD-D

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64
1	100	95	90	86	93	89	85	81	78	75	72	68	66	64	59	57	55	51
2	90	82	75	69	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	54	59	53	49	52	47	43	45	41	38	35
4	75	63	55	48	70	59	52	46	52	46	41	46	41	37	40	36	33	29
5	69	56	47	41	64	53	45	39	47	40	35	41	36	32	36	31	28	25
6	63	50	42	35	59	47	40	34	42	36	31	37	32	28	32	28	25	22
7	58	45	37	31	54	43	35	30	38	32	27	34	28	24	29	25	22	19
8	54	41	33	27	51	39	31	26	35	28	24	31	25	22	27	23	19	17
9	50	38	30	24	47	36	28	23	32	26	21	28	23	19	25	21	18	15
10	47	34	27	22	44	33	26	21	29	23	19	26	21	18	23	19	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6075	6075	6075
5°	6093	5937	5954
10°	6056	5839	5835
15°	6002	5727	5695
20°	5920	5603	5561
25°	5828	5464	5411
30°	5728	5326	5258
35°	5615	5184	5124
40°	5525	5049	4984
45°	5391	4925	4864
50°	5277	4781	4738
55°	5160	4647	4588
60°	4976	4475	4453
65°	4776	4290	4285
70°	4532	4078	4091
75°	4196	3847	3915
80°	3817	3624	3742
85°	3344	3427	3643



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	1.9
10°-20°	204.2	5.5
20°-30°	308.7	8.3
30°-40°	373.5	10.0
40°-50°	394.9	10.6
50°-60°	371.6	10.0
60°-70°	308.3	8.3
70°-80°	216.6	5.8
80°-90°	123.5	3.3
90°-100°	85.5	2.3
100°-110°	135.4	3.6
110°-120°	192.3	5.2
120°-130°	218.6	5.9
130°-140°	220.9	5.9
140°-150°	200.1	5.4
150°-160°	159.9	4.3
160°-170°	103.2	2.8
170°-180°	35.6	1.0
0°-30°	584.1	15.7
0°-40°	957.6	25.7
0°-60°	1724.1	46.3
0°-90°	2372.5	63.7
90°-120°	413.2	11.1
90°-150°	1052.8	28.3
90°-180°	1351.0	36.3
0°-180°	3724.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	753	751	745	751	751	71
15°	722	723	720	728	727	203
25°	661	666	668	677	678	304
35°	578	588	597	608	611	362
45°	482	498	514	528	532	372
55°	378	396	420	437	442	336
65°	261	288	317	337	345	259
75°	145	176	212	234	243	154
85°	45	80	118	142	152	48
90°	14	51	90	115	123	10
95°	26	46	80	103	112	28
105°	92	111	143	165	163	97
115°	162	172	198	216	222	160
125°	225	226	245	262	268	201
135°	276	276	283	296	302	213
145°	317	317	317	322	326	198
155°	347	347	346	347	347	160
165°	366	365	364	366	364	103
175°	374	373	373	375	372	36
180°	374	374	374	374	374	



TEST NUMBER: P332583-927

CATALOG NUMBER: S124DIP-S795D365U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5
2.5°	755.2	754.7	754.2	753.8	753.4	752.6	751.3	750.1	748.9	747.7	748.8
5°	753.3	752.7	752.2	751.6	751.1	750.1	748.8	747.5	746.2	744.9	746.4
7.5°	746.9	746.6	746.2	745.9	745.5	744.8	743.8	742.7	741.6	740.5	742.2
10°	741.5	741.3	741.2	740.9	740.8	740.2	739.3	738.3	737.4	736.4	738.2
12.5°	734.1	734.0	734.0	734.0	734.0	733.6	733.0	732.3	731.7	731.0	732.6
15°	722.2	722.3	722.5	722.7	722.9	722.7	722.2	721.6	721.0	720.4	722.2
17.5°	705.8	706.3	706.9	707.5	708.1	708.2	708.1	708.1	707.9	707.8	709.6
20°	694.3	694.9	695.5	696.0	696.6	697.0	697.1	697.3	697.5	697.7	699.6
22.5°	681.5	682.2	682.9	683.7	684.4	684.9	685.2	685.6	685.9	686.3	688.1
25°	660.6	661.7	662.9	664.0	665.1	666.0	666.5	667.1	667.7	668.2	670.3
27.5°	637.4	639.0	640.6	642.3	644.0	645.2	646.1	646.9	647.8	648.6	650.5
30°	621.9	623.4	624.9	626.4	627.9	629.2	630.6	631.8	633.2	634.5	636.5
32.5°	605.0	606.8	608.6	610.4	612.2	613.8	615.3	616.7	618.2	619.6	622.0
35°	578.1	580.3	582.6	584.8	587.0	589.1	591.0	592.9	594.7	596.6	599.2
37.5°	550.9	553.5	556.1	558.6	561.3	563.7	566.0	568.3	570.7	573.0	575.7
40°	533.4	535.8	538.2	540.7	543.1	545.7	548.3	550.9	553.5	556.1	559.0
42.5°	513.2	515.9	518.6	521.3	524.1	527.0	530.0	533.1	536.2	539.2	542.4
45°	482.0	485.5	489.1	492.7	496.2	499.8	503.4	506.9	510.4	514.0	517.2
47.5°	452.2	455.8	459.5	463.2	466.8	470.7	474.8	479.0	483.1	487.2	490.5
50°	430.6	434.7	438.8	442.9	447.0	451.1	455.3	459.4	463.5	467.6	471.4
52.5°	409.0	413.1	417.2	421.4	425.5	429.9	434.6	439.3	444.1	448.8	452.5
55°	377.5	381.4	385.4	389.3	393.2	398.0	403.6	409.2	414.9	420.5	424.2
57.5°	342.3	347.1	352.0	356.9	361.7	366.9	372.6	378.1	383.7	389.3	393.7
60°	319.3	324.2	329.1	334.0	338.8	344.4	350.5	356.7	362.9	369.1	373.4
62.5°	297.1	302.5	307.8	313.1	318.4	324.2	330.3	336.5	342.7	348.9	353.2
65°	261.2	267.2	273.2	279.2	285.2	291.4	297.7	304.1	310.5	316.8	321.5
67.5°	226.6	233.1	239.4	245.7	252.2	258.7	265.5	272.4	279.2	286.0	290.7
70°	203.0	209.5	215.8	222.2	228.5	235.3	242.4	249.5	256.6	263.7	268.8
72.5°	180.1	186.6	193.2	199.7	206.2	213.3	220.9	228.4	236.0	243.5	248.4
75°	145.0	151.9	158.8	165.7	172.6	180.1	187.9	195.7	203.7	211.5	216.7
77.5°	112.1	119.4	126.7	134.1	141.4	149.2	157.5	165.7	174.0	182.2	187.5
80°	91.8	99.3	106.8	114.3	121.8	129.7	137.9	146.2	154.4	162.6	168.3
82.5°	71.6	79.4	87.2	95.0	102.7	110.8	119.1	127.3	135.5	143.8	149.5
85°	44.7	52.5	60.4	68.3	76.1	84.3	92.7	101.1	109.6	118.0	123.6
87.5°	25.1	32.9	40.6	48.4	56.2	64.2	72.6	80.9	89.1	97.4	103.0
90°	14.3	22.5	30.7	38.8	47.1	55.4	63.9	72.5	81.0	89.6	95.4
92.5°	16.3	23.1	29.9	36.7	43.4	51.1	59.7	68.2	76.8	85.3	90.9
95°	26.4	30.4	34.5	38.6	42.6	48.5	56.2	64.0	71.7	79.5	84.9
97.5°	42.6	49.3	55.9	62.6	69.2	72.8	73.5	74.1	74.8	75.5	80.4
100°	55.2	61.2	67.2	73.1	79.1	81.5	80.2	78.9	77.6	76.4	80.3
102.5°	69.9	75.0	80.2	85.2	90.3	95.9	102.0	108.0	114.0	120.0	113.5
105°	91.9	95.9	100.1	104.2	108.3	114.0	121.3	128.5	135.7	143.0	148.2
107.5°	113.6	116.8	120.1	123.3	126.6	131.7	138.7	145.7	152.7	159.6	164.5
110°	127.7	130.5	133.3	136.1	138.9	143.8	150.8	157.6	164.5	171.5	175.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	141.3	144.0	146.6	149.3	151.9	156.5	163.0	169.4	175.8	182.2	186.4
115°	162.4	164.3	166.1	168.0	169.9	173.8	179.7	185.6	191.5	197.5	201.8
117.5°	182.1	183.4	184.7	185.9	187.1	190.6	196.4	202.1	207.8	213.5	217.4
120°	194.9	195.7	196.5	197.3	198.1	201.2	206.6	211.9	217.3	222.7	226.6
122.5°	207.4	207.7	207.9	208.2	208.4	211.2	216.4	221.7	226.9	232.1	235.9
125°	224.6	224.6	224.7	224.7	224.8	227.1	231.6	236.2	240.7	245.3	249.1
127.5°	241.4	241.3	241.1	241.1	240.9	242.8	246.7	250.6	254.4	258.3	261.7
130°	251.7	251.6	251.4	251.4	251.2	252.7	255.9	259.1	262.3	265.5	268.9
132.5°	261.8	261.7	261.7	261.6	261.5	262.8	265.4	268.0	270.7	273.3	276.6
135°	276.1	276.0	275.9	275.8	275.8	276.6	278.1	279.6	281.2	282.8	285.9
137.5°	289.5	289.3	289.1	289.0	288.8	289.1	290.1	291.0	291.9	292.8	295.6
140°	298.2	298.1	298.0	298.0	297.9	298.0	298.3	298.7	299.0	299.3	301.9
142.5°	305.3	305.5	305.7	305.9	306.1	306.2	306.1	306.1	306.0	306.0	308.2
145°	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	318.4
147.5°	326.8	326.9	327.1	327.3	327.4	327.5	327.4	327.3	327.3	327.3	327.4
150°	333.7	333.7	333.8	333.9	334.0	334.0	333.9	333.8	333.7	333.7	333.7
152.5°	338.9	339.1	339.2	339.4	339.5	339.5	339.5	339.3	339.2	339.1	339.2
155°	346.9	347.0	347.0	347.1	347.1	347.1	346.9	346.7	346.5	346.3	346.6
157.5°	353.8	353.7	353.7	353.6	353.6	353.5	353.3	353.1	352.8	352.7	353.0
160°	357.8	357.6	357.4	357.3	357.0	357.0	356.9	356.8	356.7	356.6	357.0
162.5°	361.4	361.2	360.9	360.7	360.4	360.3	360.2	360.1	360.1	360.0	360.4
165°	365.9	365.6	365.3	365.0	364.6	364.5	364.5	364.5	364.5	364.5	365.0
167.5°	369.5	369.2	368.8	368.5	368.2	368.0	368.0	368.0	367.9	367.9	368.4
170°	371.5	371.1	370.7	370.4	370.0	369.9	369.9	370.0	370.0	370.1	370.6
172.5°	372.9	372.5	372.1	371.8	371.4	371.2	371.3	371.4	371.4	371.5	371.9
175°	374.3	373.9	373.6	373.2	372.8	372.6	372.7	372.8	372.9	372.9	373.5
177.5°	375.0	374.6	374.3	373.9	373.6	373.4	373.6	373.7	373.8	373.8	374.3
180°	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5
2.5°	749.8	750.9	751.9	752.4	752.3	752.1	751.9	751.8
5°	747.9	749.4	750.8	751.5	751.3	751.1	751.0	750.8
7.5°	743.9	745.5	747.3	748.0	747.8	747.6	747.4	747.3
10°	739.8	741.5	743.2	743.9	743.8	743.5	743.4	743.2
12.5°	734.1	735.7	737.2	737.9	737.9	737.8	737.8	737.8
15°	723.8	725.5	727.1	727.9	727.8	727.5	727.4	727.1
17.5°	711.2	713.0	714.7	715.5	715.3	715.2	715.0	714.9
20°	701.4	703.3	705.2	706.2	706.2	706.2	706.2	706.2
22.5°	690.0	691.8	693.7	694.8	695.1	695.4	695.7	696.0
25°	672.3	674.4	676.4	677.6	677.7	677.9	678.1	678.3
27.5°	652.4	654.3	656.3	657.4	657.6	657.8	658.1	658.2
30°	638.6	640.6	642.7	644.0	644.4	644.7	645.1	645.5
32.5°	624.4	626.8	629.1	630.5	630.8	631.2	631.6	632.0
35°	601.8	604.4	607.0	608.6	609.2	609.7	610.4	610.9
37.5°	578.3	581.0	583.6	585.3	585.8	586.5	587.0	587.6
40°	561.7	564.6	567.4	569.1	569.9	570.6	571.4	572.1
42.5°	545.5	548.6	551.7	553.6	554.1	554.8	555.4	556.0
45°	520.4	523.6	526.7	528.8	529.7	530.7	531.6	532.5
47.5°	493.8	497.1	500.4	502.6	503.7	504.9	506.0	507.1
50°	475.2	478.9	482.6	485.1	486.2	487.4	488.5	489.6
52.5°	456.3	460.0	463.7	466.2	467.3	468.4	469.5	470.7
55°	427.9	431.7	435.5	437.9	439.0	440.1	441.2	442.4
57.5°	398.2	402.7	407.1	409.9	410.9	411.9	413.0	414.1
60°	377.7	382.0	386.3	389.2	390.7	392.2	393.7	395.2
62.5°	357.4	361.8	366.1	369.0	370.5	372.0	373.4	374.9
65°	326.2	330.9	335.6	338.7	340.2	341.7	343.1	344.6
67.5°	295.5	300.2	305.0	308.1	309.6	311.0	312.5	313.9
70°	273.9	278.9	284.0	287.2	288.4	289.8	291.0	292.4
72.5°	253.3	258.3	263.2	266.3	267.8	269.3	270.7	272.2
75°	222.0	227.2	232.5	235.9	237.7	239.3	241.0	242.6
77.5°	192.8	198.1	203.4	207.0	208.8	210.6	212.4	214.2
80°	173.9	179.5	185.1	188.6	190.1	191.6	193.1	194.6
82.5°	155.3	161.1	166.8	170.6	172.1	173.8	175.5	177.1
85°	129.2	134.8	140.5	144.2	146.1	147.9	149.8	151.7
87.5°	108.4	114.0	119.5	123.1	124.8	126.4	128.1	129.8
90°	101.2	107.0	112.8	116.5	118.1	119.8	121.4	123.0
92.5°	96.6	102.3	107.9	111.5	113.0	114.5	116.1	117.6
95°	90.3	95.8	101.2	104.8	106.5	108.3	110.0	111.8
97.5°	85.4	90.3	95.2	98.5	100.2	101.9	103.5	105.3
100°	84.4	88.3	92.4	95.1	96.4	97.8	99.2	100.5
102.5°	107.0	100.5	94.0	91.5	92.9	94.4	95.9	97.4
105°	153.4	158.7	163.9	166.2	165.4	164.7	164.0	163.2
107.5°	169.4	174.3	179.2	182.4	183.9	185.5	187.1	188.7
110°	180.4	184.8	189.3	192.3	193.9	195.7	197.3	199.0





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	190.5	194.6	198.8	201.7	203.4	205.2	206.9	208.7
115°	206.0	210.2	214.4	217.3	218.6	219.9	221.2	222.5
117.5°	221.3	225.1	229.0	231.6	233.1	234.6	236.1	237.6
120°	230.4	234.2	238.1	240.7	242.2	243.5	244.9	246.3
122.5°	239.7	243.5	247.3	249.9	251.1	252.3	253.6	254.8
125°	252.8	256.6	260.3	262.8	264.0	265.1	266.3	267.5
127.5°	265.0	268.3	271.6	273.9	275.1	276.4	277.6	278.8
130°	272.4	275.8	279.2	281.5	282.6	283.7	284.9	286.0
132.5°	279.9	283.1	286.5	288.6	289.7	290.7	291.8	292.9
135°	289.1	292.2	295.2	297.5	298.7	299.9	301.2	302.5
137.5°	298.6	301.4	304.3	306.2	307.0	308.0	308.9	309.7
140°	304.5	307.1	309.7	311.6	312.6	313.5	314.6	315.6
142.5°	310.5	312.8	315.1	316.6	317.4	318.2	319.0	319.8
145°	319.6	320.8	321.9	323.0	323.8	324.7	325.6	326.5
147.5°	327.6	327.8	328.0	328.4	329.2	329.8	330.4	331.1
150°	333.7	333.7	333.7	333.7	333.8	333.9	333.9	334.0
152.5°	339.3	339.4	339.5	339.5	339.5	339.5	339.5	339.4
155°	346.8	347.1	347.3	347.4	347.1	347.0	346.8	346.6
157.5°	353.3	353.6	353.9	353.9	353.6	353.3	353.0	352.7
160°	357.4	357.8	358.1	358.1	357.8	357.4	357.0	356.6
162.5°	360.8	361.2	361.6	361.5	361.1	360.7	360.2	359.8
165°	365.5	366.0	366.5	366.5	365.9	365.4	364.8	364.2
167.5°	369.0	369.6	370.0	370.0	369.4	368.8	368.1	367.6
170°	371.1	371.6	372.1	372.0	371.5	370.8	370.2	369.6
172.5°	372.5	373.0	373.4	373.4	372.7	372.0	371.4	370.7
175°	374.1	374.6	375.2	375.1	374.3	373.6	372.8	372.1
177.5°	374.7	375.1	375.5	375.3	374.8	374.1	373.6	373.0
180°	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3

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